Build a Gakken Edo-Style Clock

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PARTS:

- Gakken Edo-Style clock (1)

SUMMARY

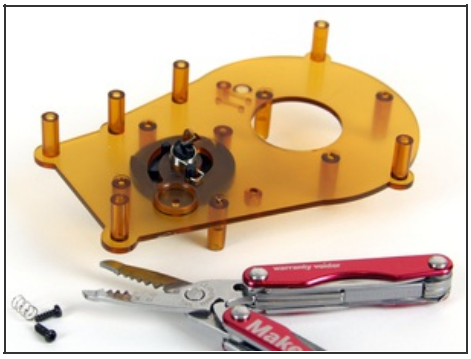
The kit comes with illustrated instructions that are fairly easy to follow. However, there are a few tips and tricks that this guide will cover, making the build process really easy.

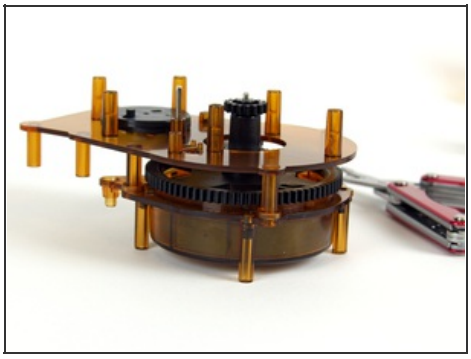
This is not a detailed step-by-step. Those can be found in the magazine included with the kit. This guide points out some of the more important issues when building the kit.

Step 1 — Build a Gakken Edo-Style Clock

- Open up the box, and check your parts against the parts list in the included magazine.

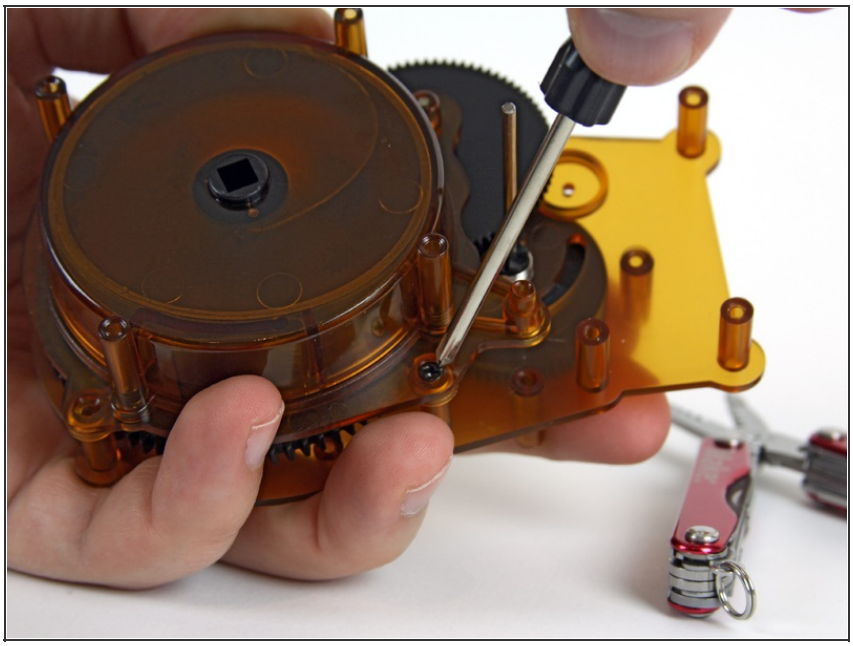
Step 2





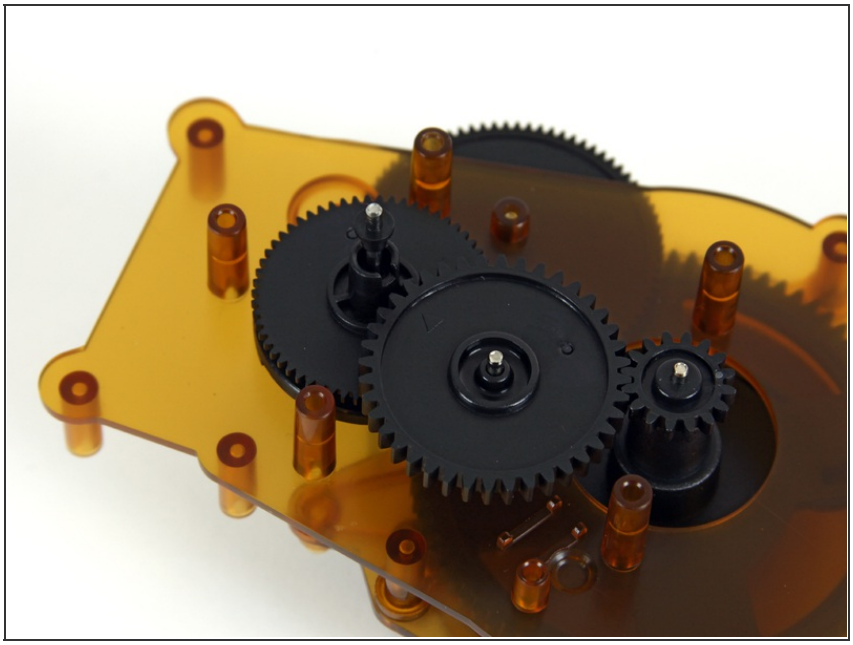
- All the steps (and numbering) will directly correlate to the steps in the included magazine.
- 1.1 shows the location of the spring system. This part is used to switch between the timing mechanism for 9 - 3 and 3-9. (see instructions)
- 1.2 shows the cam mechanism assembly. Simple!
- 1.3 Gear assemblies attached to the winding mechanism.

Step 3



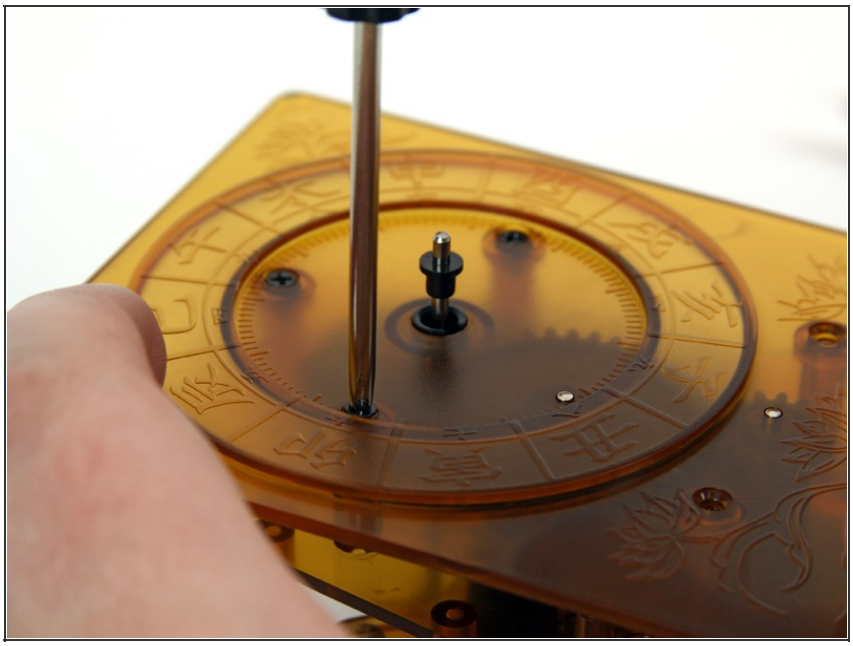
- 1.4 The entire assembly is screwed to the center plate.
  - If you plan on hooking up an Arduino, this is the time to add the metal strips as per the directions. I did not add them.

Step 4



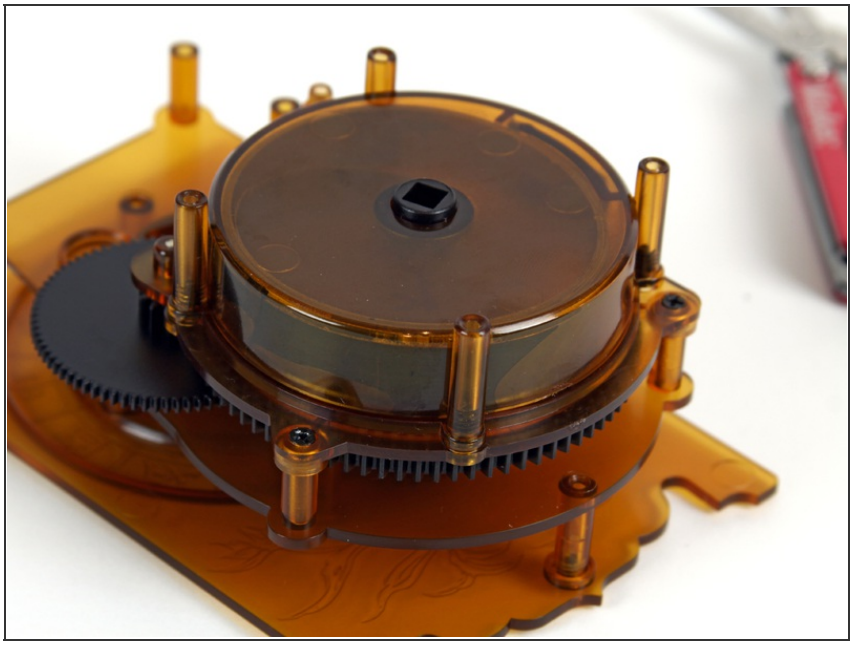
- 2.1 Additional gears are added
  - Make sure the arrow on the gear faces the "notch" in the "other" gear. I have no other way of explaining this. Take a look at the picture to see what I mean.

Step 5



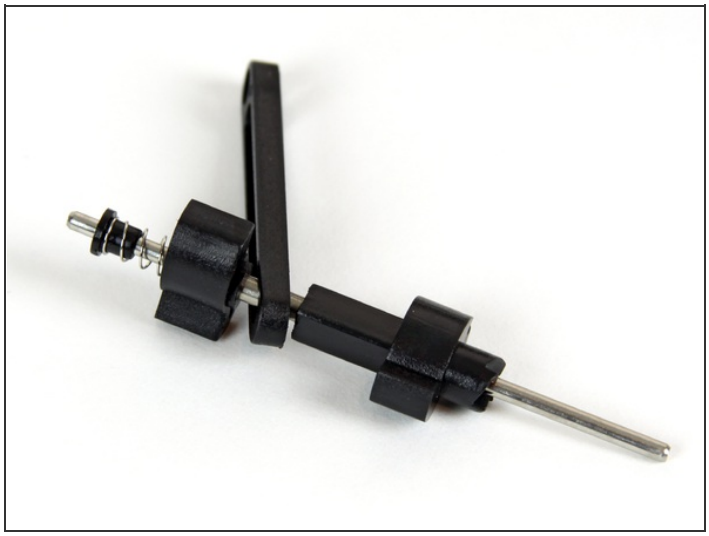
- 3.1 Add the faceplate.
- And remove the pin (shown in picture) that held all the gears together (see instructions).

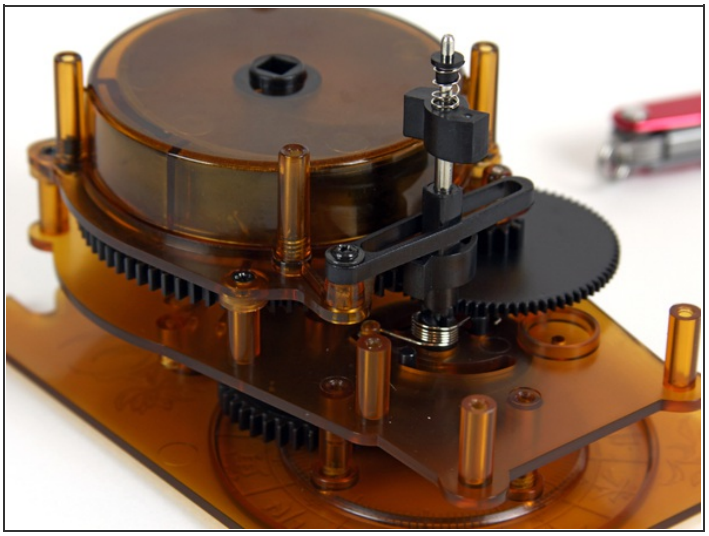
Step 6



- 4.1 Now you can attach the spring mechanism with 3 small screws in the back.

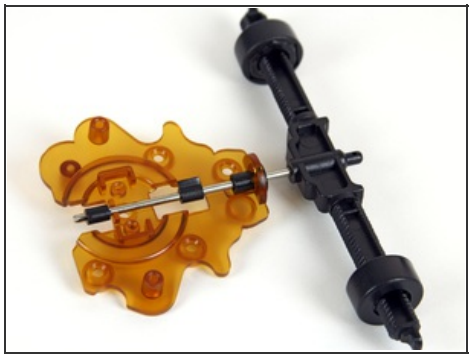
Step 7





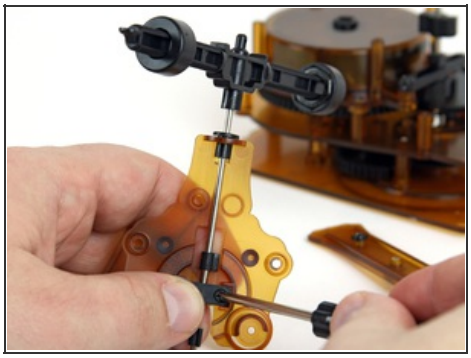
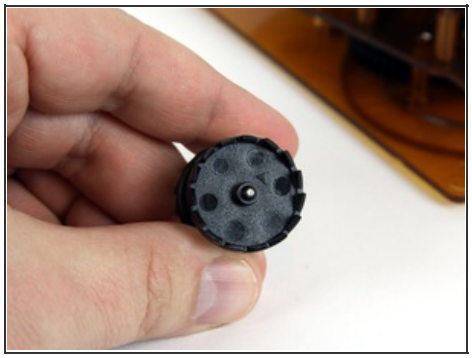
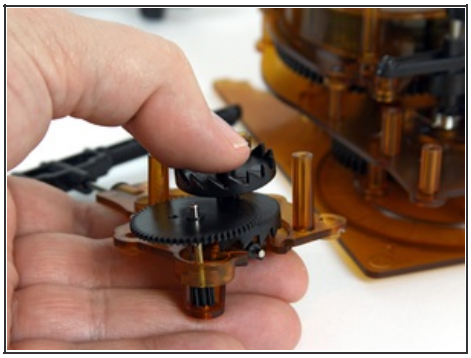
- 5.1 This little mechanism switches the rotating weights based on the time of day.
- It's easy to assemble.
- Make sure the "square" part of the assembly is in the "rectangular" opening in the longer piece. Again, refer to the instructions.
  - It is NOT completely assembled in the first picture. It is in the 2nd!
- Next, attach the entire assembly to the clock body with 1 screw that has an integral washer.

Step 8

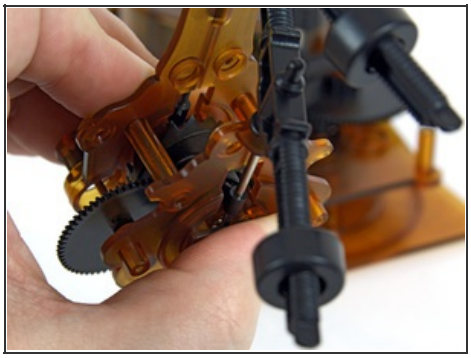
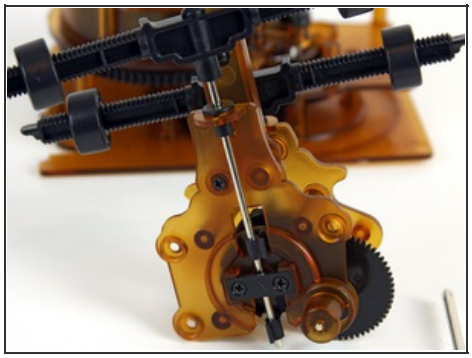
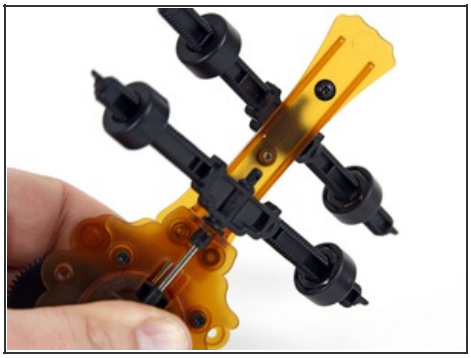

- 6.1 It says to add the screws to this piece. I did, but found it easier to remove them and add them in a later step.
- 6.2 Now you can assemble 1 of the timing weights. Match the shorter one with the part as in picture 2.
- 6.3 Attach the retaining plate (arrow up).

Step 9

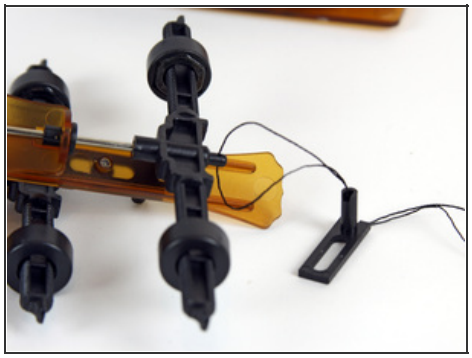
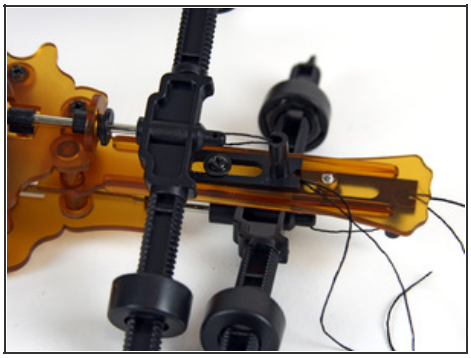
- 6.3 continued
- Next, attach the weight system with the longer rod to the plastic piece pictured.
  - And add the retaining clip (arrow up).
- 6.4 find the arrow on the escapement gear.
- 6.5 assemble all 3 gears as per the instructions. Make sure the arrow is lined up with the opening on the plastic plate.

Step 10

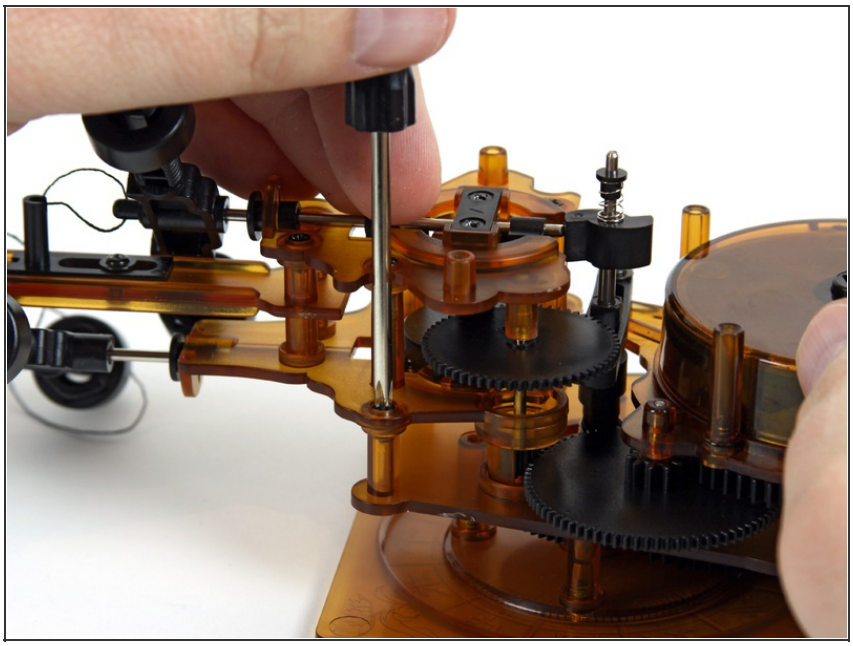
- 6.6 Connect both assemblies together.
- 6.7 Do not forget to add the 3rd piece of plastic. This is used to hang the weights.

Step 11

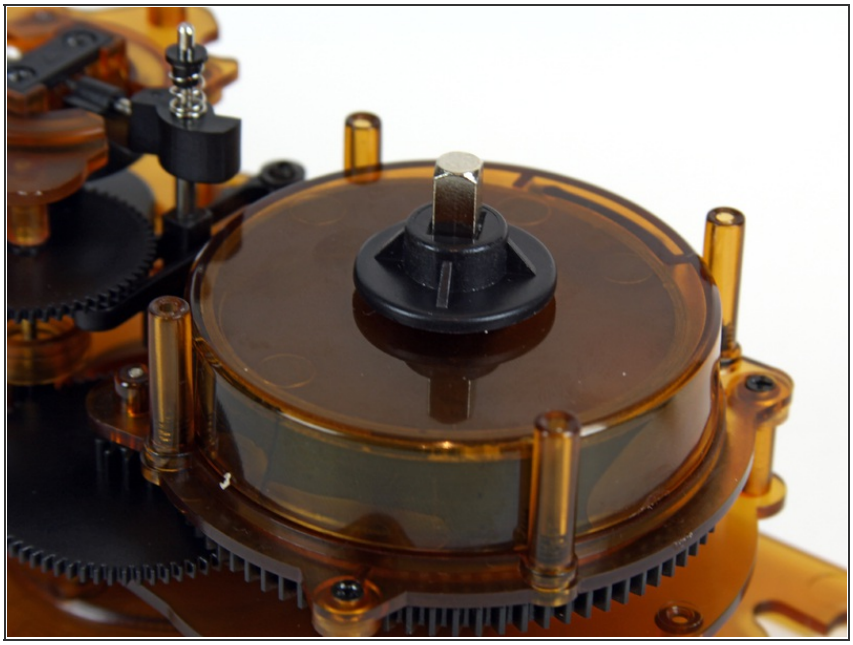
- 6.8 Now you need to hang the weights.
  - Thread the included nylon string through the top of the weight;
  - Next, through the hole in the plastic hanger;
  - Followed by threading it under the hanger and out the top.
- We will tie them later.

Step 12



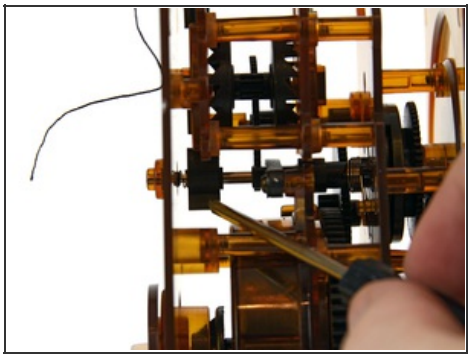
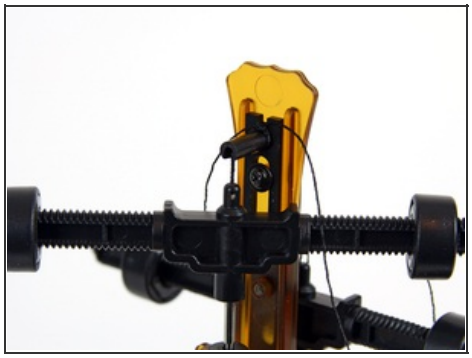
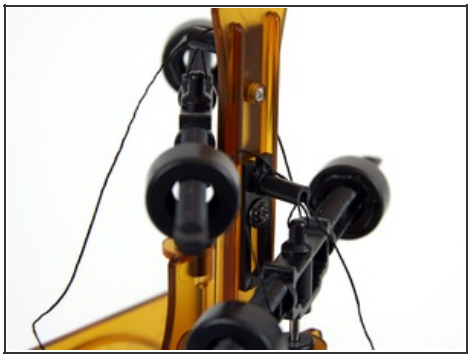
- 7.1 Attach the weight system to the clock body with 3 screws.

Step 13



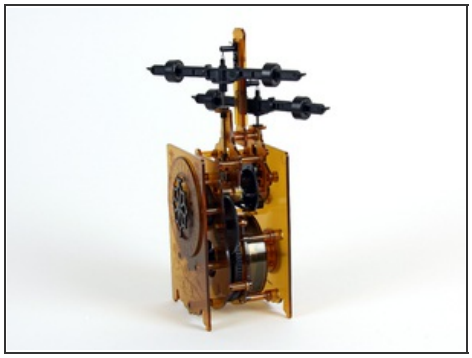
- 8.1 Insert the square bar into the spring mechanism
- and attach the back plate and cap (not pictured).

Step 14

- 9.1 Adjust the height of each weight mechanism.
  - You need to look inside the clock at the part that raises and lowers each mechanism (picture 1)
  - The rod of the weight should be 1mm above that part (when it is in the horizontal position).
  - If it is not in the horizontal position, use a screw driver to "flip it" horizontally. Adjust the corresponding weight to be 1mm above it by tying a knot in the string and adjusting the plastic weight hanger. (Look at the instructions; it's easier than it sounds!)
  - Flip the mechanism again and adjust the other weight.

Step 15


- 10.1 Add the dial
- Wind it up and enjoy.
- I waited until I heard a large "clunk;" at that point I adjusted the dial to be 9pm.
- To adjust the time: Hold the clock upside down and let the spring mechanism spin. You can hold the large gear on the side to stop it when the time is correct.

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